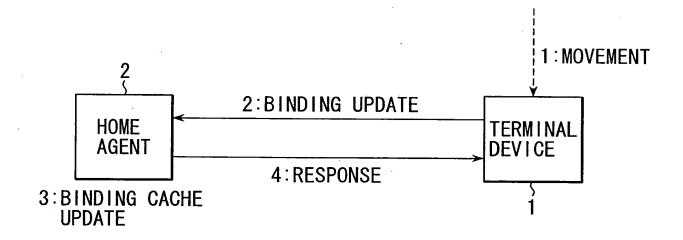
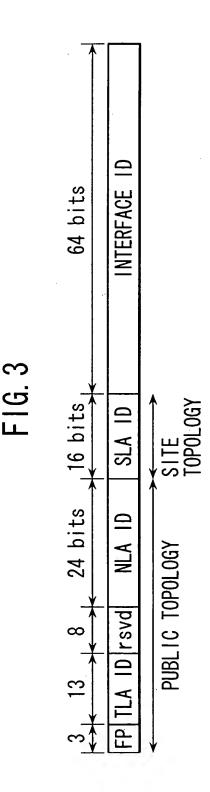
FIG. 1



HOP LIMIT FLOW LABEL
NEXT HEADER EXTENSION HEADER ···· (OPTIONAL) DESTINATION ADDRESS SOURCE ADDRESS F1G. 2 4 bytes VERSION TRAFFIC CLASS
PAYLOAD LENGTH



SOURCE: TERMINAL DEVICE (C/O) ADDRESS DESTINATION: HOME AGENT ADDRESS

<DESTINATION OPTIONS HEADER>
HOME ADDRESS OF TERMINAL DEVICE

<DESTINATION OPTIONS HEADER > BINDING UPDATE

<AUTHENTICATION HEADER>

IPv6 HEADER

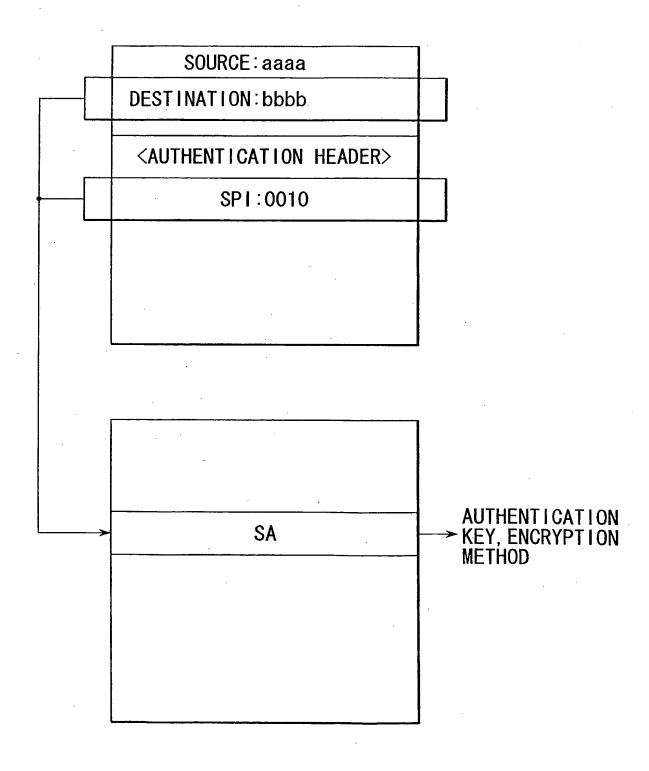
EXTENSION HEADER

F 6.5

| bytes

NEXT HEADER	PAYLOAD LENGTH	RESERVED
	SECURITY PARAMETERS INDEX (SPI)	TERS INDEX(SPI)
	SEQUENCE	SEQUENCE NUMBER
	AUTHENTICATION DATA(VARIABLE)	DATA (VARIABLE)

FIG. 6



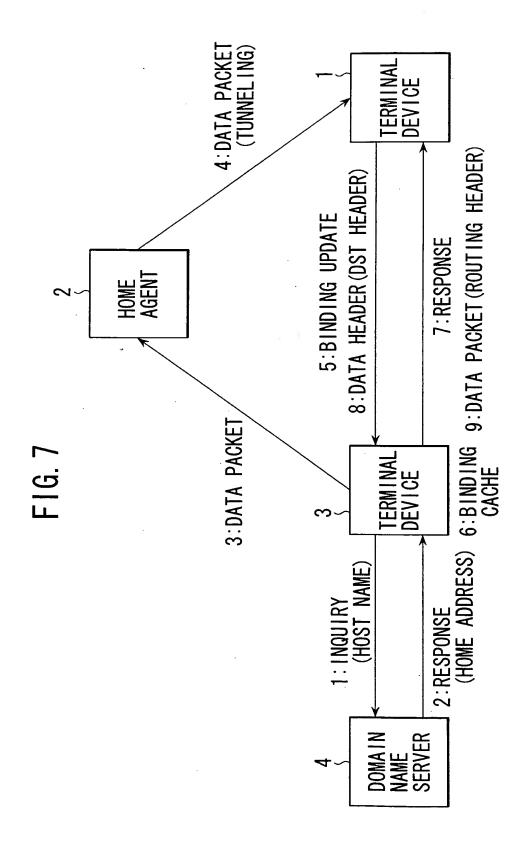


FIG. 8

HOST NAME	HOME ADDRESS
aaaa	XXXX
bbbb	YYYY
cccc	ZZZZ
	. !

FIG. 9

SOURCE: TERMINAL	DEVICE 3	ADI	DRESS		
DESTINATION: HOM	E ADDRESS	0F	TERMINAL	DEVICE	1

SOURCE: ADDRESS OF HOME AGENT 2
DESTINATION: TERMINAL DEVICE 1 (C/O) ADDRESS

SOURCE: TERMINAL DEVICE 3 ADDRESS

DESTINATION: HOME ADDRESS OF TERMINAL DEVICE 1

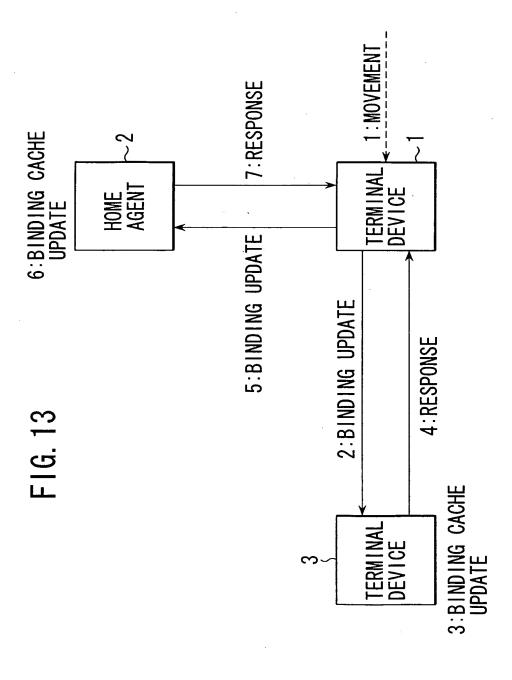
DATA

FIG. 11

SOURCE: TERMINAL DEVICE 1 (C/O) ADDRESS DESTINATION: TERMINAL DEVICE 3 ADDRESS

< DESTINATION OPTIONS HEADER>
HOME ADDRESS OF TERMINAL DEVICE 1

SOURCE: TERMINAL DEVICE 3 ADDRESS
DESTINATION: TERMINAL DEVICE 1 (C/O) ADDRESS



SOURCE: TERMINAL DEVICE 1 (C/O) ADDRESS DESTINATION: TERMINAL DEVICE 3 ADDRESS
<pre></pre>
< DESTINATION OPTIONS HEADER > BINDING UPDATE
<authentication header=""></authentication>

FIG. 15

SOURCE: TERMINAL DEVICE 1 (C/O) ADDRESS DESTINATION: HOME AGENT ADDRESS			
<pre></pre>			
<pre><destination header="" options=""> BINDING UPDATE</destination></pre>			
<authentication header=""></authentication>			

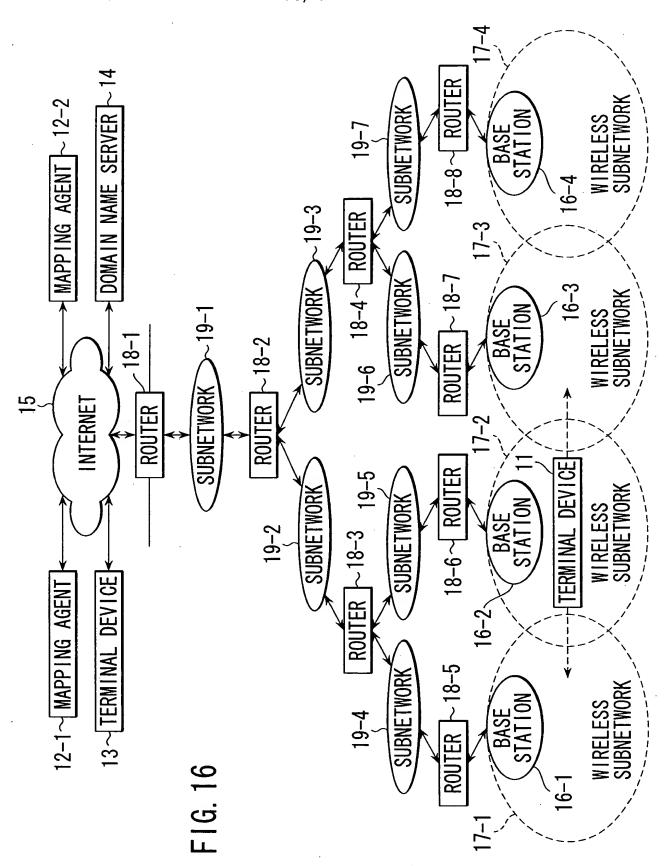


FIG. 17

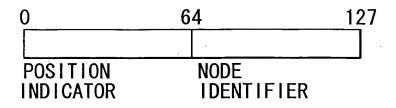


FIG. 18

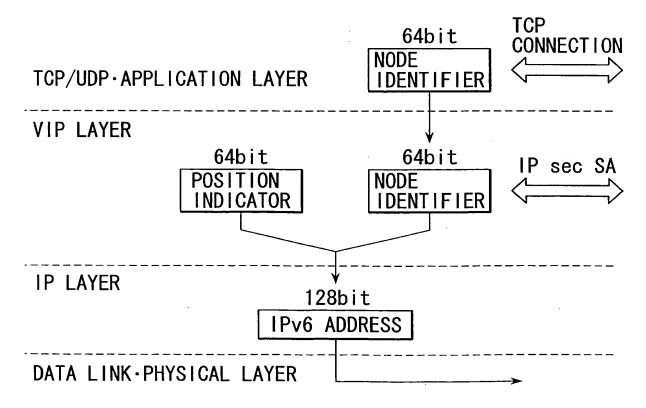


FIG. 19

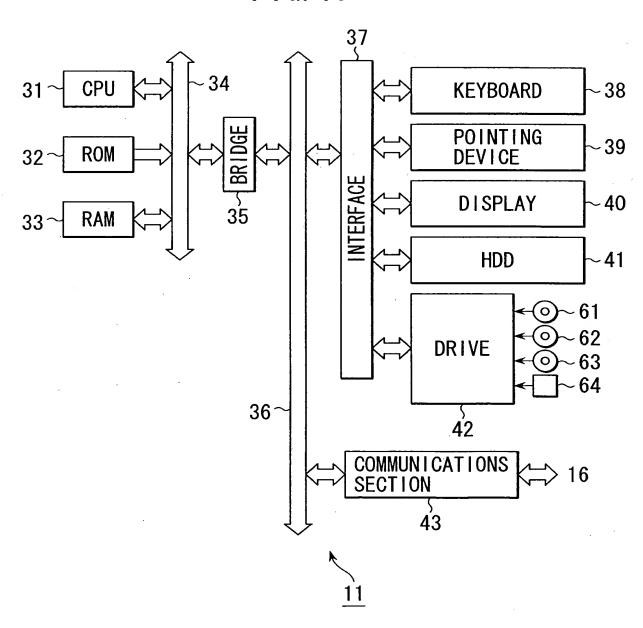
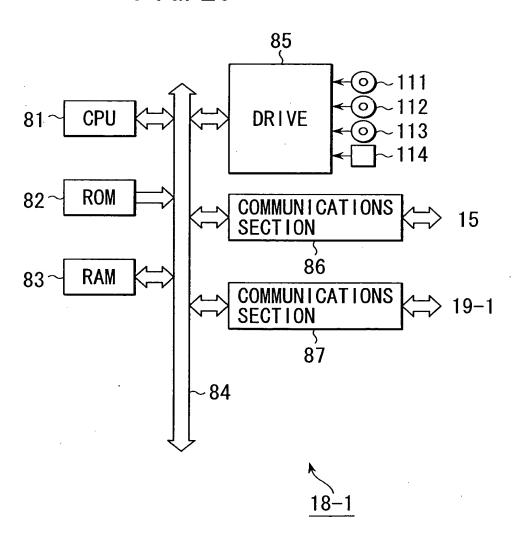


FIG. 20



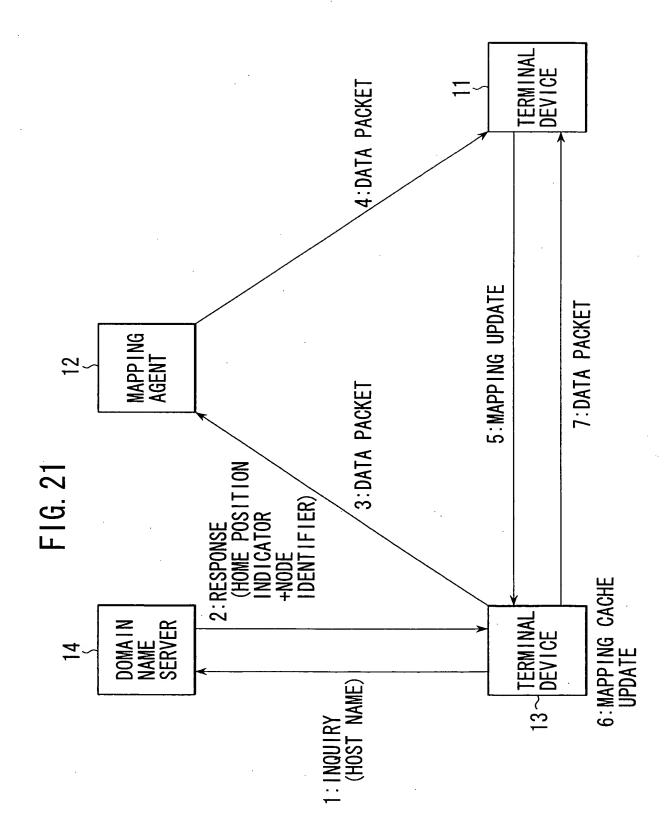


FIG. 22

HOST NAME	NODE IDENTIFIER	HOME POSITION INDICATOR
aaaa	αααα	alalalal
bbbb	ββββ	b1 b1 b1 b1
CCCC	7777	C1 C1 C1 C1

FIG. 23

SOURCE: TERMINAL DEVICE 13	ADDRESS
DESTINATION: HOME POSITION	INDICATOR+NODE
IDENTIFIER OF	TERMINAL DEVICE 11

SOURCE: TERMINAL DEVICE 13 ADDRESS
DESTINATION: CURRENT POSITION INDICATOR+NODE
IDENTIFIER OF TERMINAL DEVICE 11

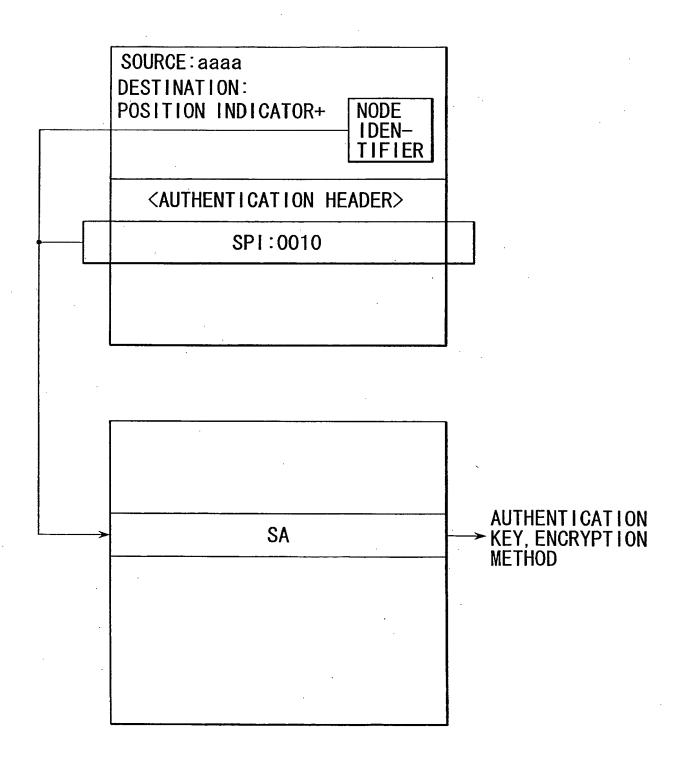
DATA

FIG. 25

SOURCE: TERMINAL DEVICE 13 ADDRESS
DESTINATION: CURRENT POSITION INDICATOR+NODE
IDENTIFIER OF TERMINAL DEVICE 11

<AUTHENTICATION HEADER>

FIG. 26



START OF COMMUNICATION PROCESSING TERMINAL DEVICE 13 INDICATES THE HOST NAME OF TERMINAL DEVICE 11. AND REQUESTS THE HOME POSITION INDICATOR AND NODE ~S11 IDENTIFIER OF TERMINAL DEVICE 11 FROM THE NAME SERVER THE NAME SERVER TRANSMITS THE HOME POSITION INDICATOR AND -S12 NODE IDENTIFIER OF TERMINAL DEVICE 11 TO THE TERMIANL DEVICE 13 THE TERMINAL DEVICE 13 LINKS THE RECEIVE HOME POSITION INDI--S13 CATOR WITH THE NODE IDENTIFIER AND GENERATES AN LIN6 ADDRESS THE TERMINAL DEVICE 13 TRANSMITS THE PACKET TO THE MAPPING -S14 AGENT BASED ON THE GENERATED LIN6 ADDRESS THE MAPPING AGENT REWRITES THE POSITION INDICATOR OF THE TRANSMIT DESTINATION ADDRESS OF THE RECEIVED PACKET INTO THE ~S15 CURRENT POSITION INDICATOR AND SENDS IT THE TERMINAL DEVICE 11 RECEIVES THE PACKET THAT WAS SENT -S16 THE TERMINAL DEVICE 11 TRANSMITS TO TERMINAL DEVICE 13, THE MAPPING UPDATE PACKET SET WITH THE CURRENT POSITION -S17 INDICATOR THE TERMINAL DEVICE 13 RECEIVES THE MAPPING UPDATE PACKET ~S18 **S19** IS THE NO AUTHENTICATION DATA OF THE MAPPING UPDATE PACKET CORRECT **↓YES** THE TERMINAL DEVICE 13 REGISTERS THE CURRENT POSITION -S20 INDICATOR OF TERMINAL DEVICE 11 IN THE MAPPING CACHE

END

THE TERMINAL DEVICE 13 TRANSMITS THE PACKET TO THE TERMINAL

DEVICE 11 BASED ON THE CURRENT POSITION INDICATOR

~S21

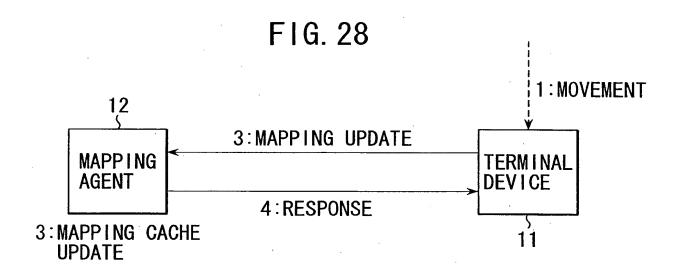
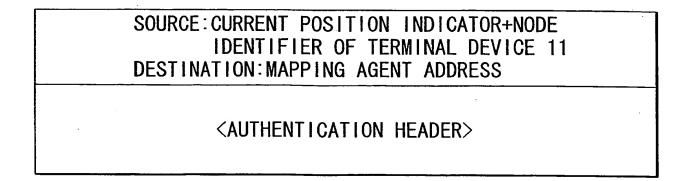
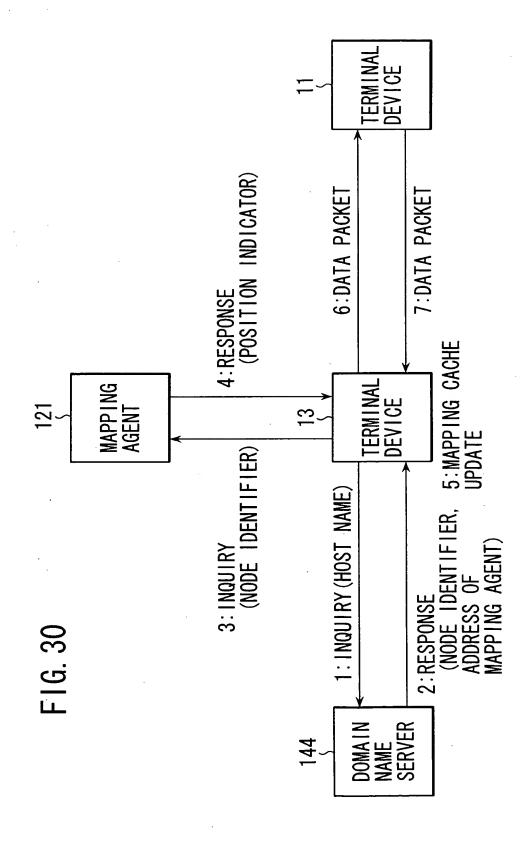


FIG. 29





F16.31

NODE IDENTIFIER MAPPING AGENT ADDRESS	iiii, jjjj, kkkk	mmmm	nnnn, 0000	
NODE IDENTIFIER	αααα	BBBB	Y Y Y Y	
HOST NAME	aaaa	qqqq	0000	

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FIG. 32

NODE IDENTIFIER	CURRENT POSITION INDICATOR
αααα	e1 e1 e1 e1

FIG. 33

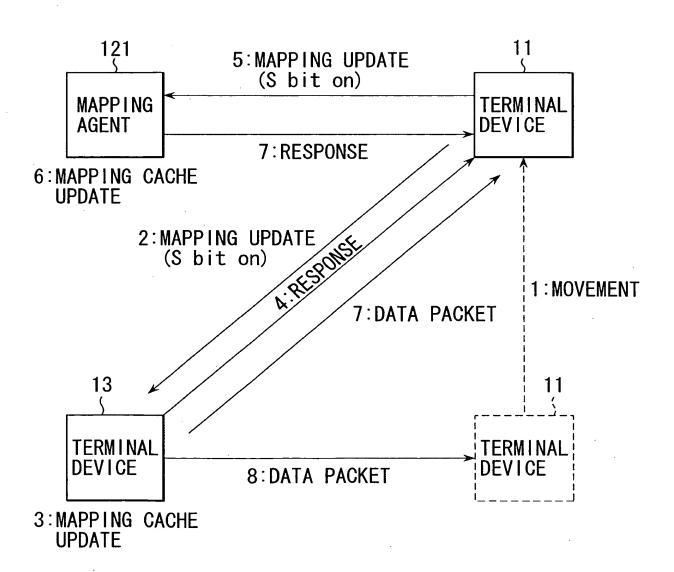
SOURCE: TERMINAL	_ DEVICE 13 ADDRESS SITION INDICATOR+NODE	
IDE	ENTIFIER OF TERMINAL DEVICE 1	
· · ·		

DATA

FIG. 34

SOURCE: POSITION INDICATOR+NODE IDENTIFIER OF TERMINAL DEVICE 11 DESTINATION: TERMINAL DEVICE 13 ADDRESS

FIG. 35



SOURCE: NEW POSITION INDICATOR+NODE IDENTIFIER
OF TERMINAL DEVICE 11
DESTINATION: TERMINAL DEVICE 13 ADDRESS

AUTHENTICATION HEADER>
NEW POSITION INDICATOR
OLD POSITION INDICATOR
CURRENT TIME
EFFECTIVE TIME

FIG. 37

SOURCE: NEW POSITION INDICATOR+NODE IDENTIFIER
OF TERMINAL DEVICE 11
DESTINATION: MAPPING AGENT ADDRESS

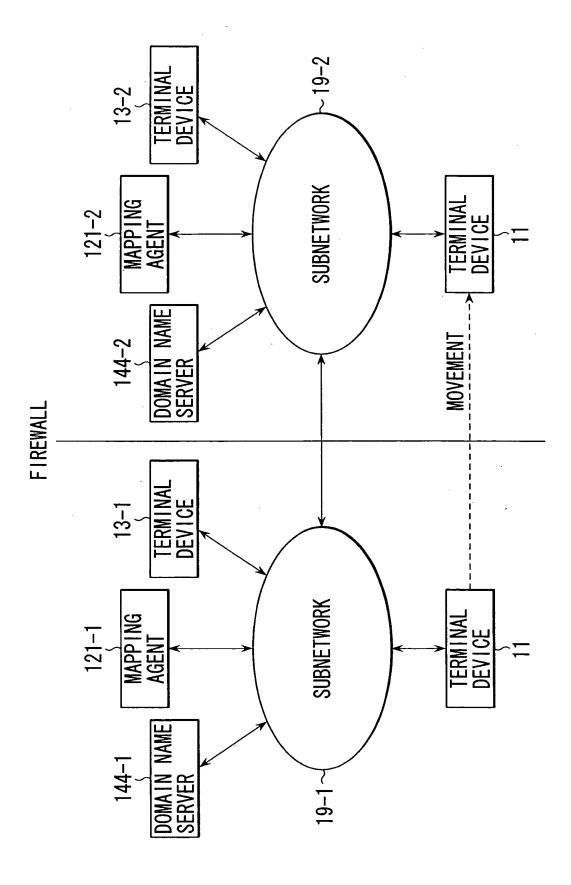
AUTHENTICATION HEADER>
NEW POSITION INDICATOR
OLD POSITION INDICATOR
CURRENT TIME
EFFECTIVE TIME

SOURCE: TERMINAL DEVICE 13 ADDRESS
DESTINATION: NEW POSITION INDICATOR+NODE
IDENTIFIER OF TERMINAL DEVICE 11

DATA

FIG. 39

SOURCE: TERMINAL DEVICE 13 ADDRESS
DESTINATION: OLD POSITION INDICATOR+NODE
IDENTIFIER OF TERMINAL DEVICE 11



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F16 41

			ļ	
EFFECTIVE TIME	20	30	09	
TIME	10:14	10:31	11:03	
OLD POSITION INDICATOR	hihihihi	11111111	1, 1, 1, 1, 1, 1	
NEW POSITION INDICATOR	e1 e1 e1 e1	ना ना ना ना	g1 g1 g1 g1	
NODE IDENTIFIER	αααα	BBBB	7777	

START OF PROCESSING TO NOTIFY OF CURRENT POSITION INDICATOR TERMINAL DEVICE ACQUIRES POSITION INDICATOR FOR -S41 CURRENT SUBNETWORK TERMINAL DEVICE SELECTS SPECIFIED MAPPING AGENT ~ \$42 TERMINAL DEVICE GENERATES MAPPING UPDATE PACKET ~ S43 WITH AUTHENTICATION HEADER TERMINAL DEVICE TRANSMITS MAPPING UPDATE PACKET ~ S44 TO MAPPING AGENT MAPPING AGENT RECEIVES MAPPING UPDATE PACKET **S46** IS NO AUTHENTICATION DATA CORRECT **TYES** MAPPING AGENT REGISTERS CURRENT POSITION - S47 INDICATOR IN MAPPING CACHE MAPPING AGENT TRANSMITS THE ACKNOWLEDGE - S48 RESPONSE PACKET TO TERMINAL DEVICE TERMINAL DEVICE RECEIVES THE ACKNOWLEDGE **S49** RESPONSE PACKET **S50** WAS NO CURRENT POSITION INDICATOR SENT TO ALL MAPPING AGENTS YES **END**

START OF COMMUNICATION PROCESSING TERMINAL DEVICE 13 INDICATES THE HOST NAME OF TERMINAL DEVICE 11, AND REQUESTS THE NODE IDENTIFIER ~ S81 AND MAPPING AGENT ADDRESS OF TERMINAL DEVICE 11 FROM THE NAME SERVER THE NAME SERVER TRANSMITS THE NODE IDENTIFIER AND MAPPING AGENT ADDRESS OF TERMINAL DEVICE 11 TO THE ~S82 TERMINAL DEVICE 13 THE TERMINAL DEVICE 13 SELECTS THE MAPPING AGENT **S83 ADDRESS** BASED ON THE SELECTED ADDRESS, THE TERMINAL DEVICE 13 REQUESTS THE CURRENT POSITION INDICATOR CORRE-- S84 SPONDING TO TERMINAL DEVICE 11 FROM THE MAPPING AGENT THE MAPPING AGENT TRANSMITS TO TERMINAL DEVICE 13. THE CURRENT POSITION INDICATOR CORRESPONDING TO - S85 TERMINAL DEVICE 11 THE TERMINAL DEVICE 13 REGISTERS IN THE MAPPING - S86 CACHE. THE CURRENT POSITION INDICATOR CORRESPONDING TO TERMINAL DEVICE 11 THE TERMINAL DEVICE 13 CONFIGURES THE ADDRESS BASED ON THE NODE IDENTIFIER AND CURRENT POSITION - S87 INDICATOR CORRESPONDING TO TERMINAL DEVICE 11 THE TERMINAL DEVICE 13 TRANSMITS THE PACKET TO TERMINAL DEVICE 11 BASED ON THE ADDRESS THAT WAS ~S88 **CONFIGURED**

THE TERMINAL DEVICE 11 TRANSMITS THE PACKET TO THE TERMINAL DEVICE 13

- S89

END

START OF PROCESSING FOR MOVEMENT TERMINAL DEVICE 11 ACQUIRES THE POSITION ~S101 INDICATOR FOR THE CONNECTED SUBNETWORK TERMINAL DEVICE 11 TRANSMITS TO TERMINAL DEVICE 13, A NEW POSITION INDICATOR AND OLD POSITION -S102 INDICATOR IN THE MAPPING UPDATE PACKET SET WITH THE S BIT TERMINAL DEVICE 13 REGISTERS OLD POSITION INDICATOR AND NEW POSITION INDICATOR IN THE - S103 MAPPING CACHE TERMINAL DEVICE 13 TRANSMITS THE ACKNOWLEDGE ~S104 RESPONSE PACKET TO TERMINAL DEVICE 11 TERMINAL DEVICE 11 TRANSMITS TO THE MAPPING AGENT. A NEW POSITION INDICATOR AND OLD POSITION - S105 INDICATOR IN THE MAPPING UPDATE PACKET SET WITH THE S BIT THE MAPPING AGENT REGISTERS THE OLD POSITION -S106 INDICATOR AND NEW POSITION INDICATOR IN THE MAPPING CACHE THE MAPPING AGENT TRANSMITS THE ACKNOWLEDGE - S107 RESPONSE PACKET TO THE TERMINAL DEVICE 11 THE TERMINAL DEVICE 13 ALONG WITH TRANSMITTING A PACKET TO TERMINAL DEVICE 11, BASED ON THE NEW -S108 POSITION INDICATOR, ALSO TRANSMITS A PACKET BASED ON THE OLD POSITION INDICATOR **END**

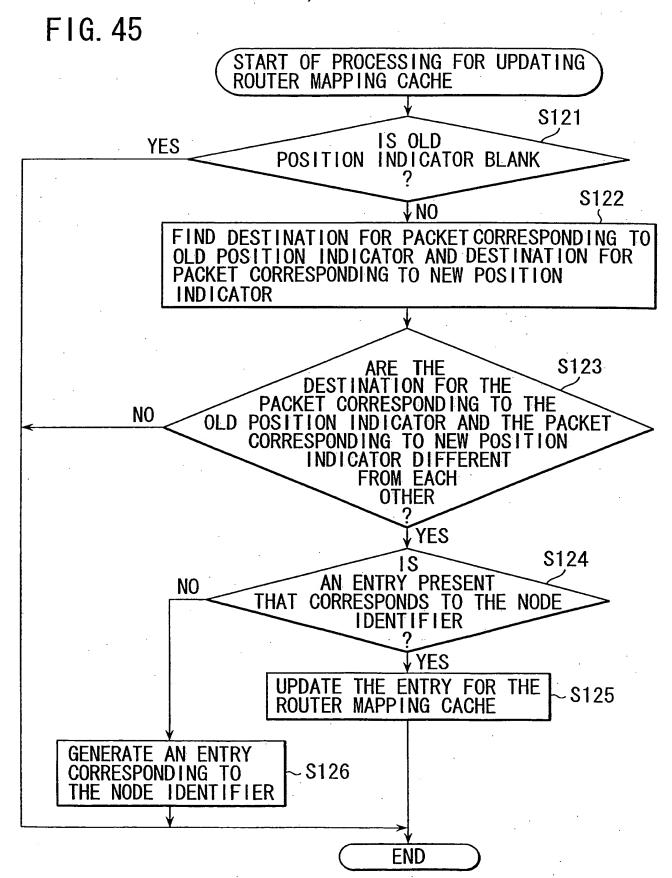
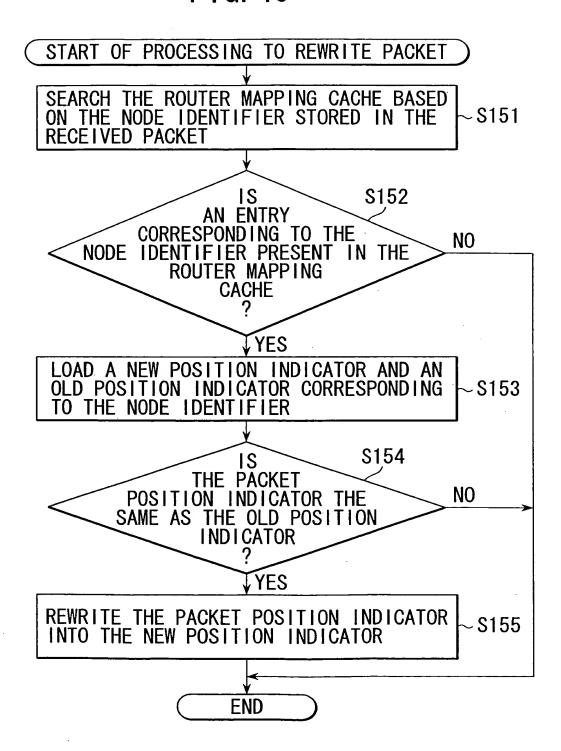


FIG. 46



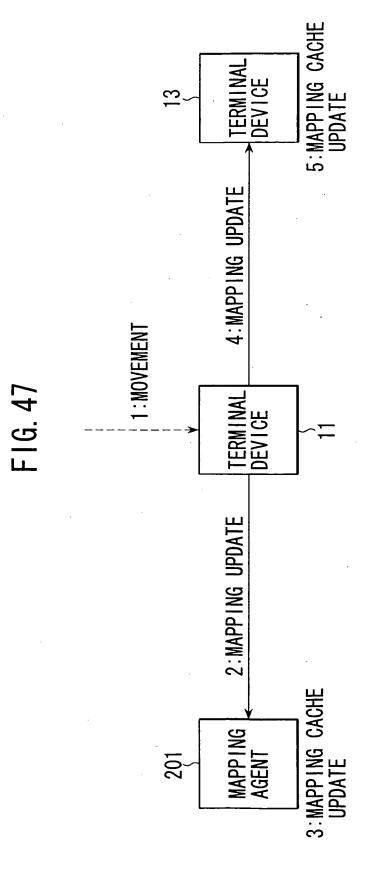
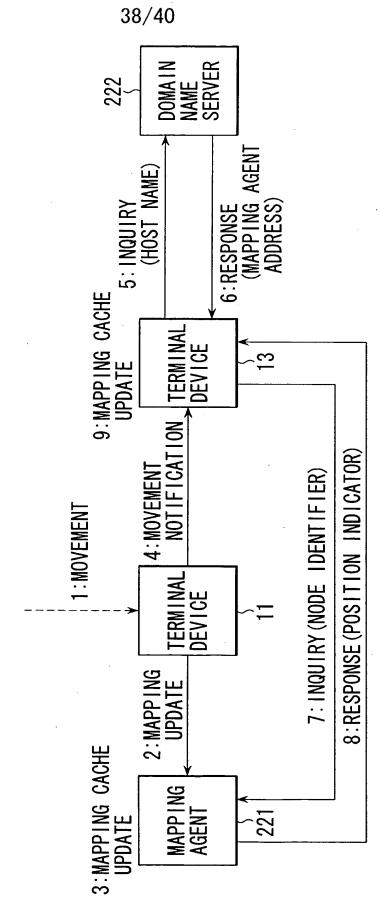


FIG. 48



F1G. 49

FIG 50

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FIG. 51

START OF PROCESSING TO UPDATE MAPPING CACHE
TERMINAL DEVICE 11 ACQUIRES POSITION INDICATOR FOR CURRENT SUBNETWORK ~\$231
TERMINAL DEVICE 11 GENERATES MAPPING UPDATE PACKET ~\$232
TERMINAL DEVICE 11 TRANSMITS THE MAPPING UPDATE PACKET TO MAPPING AGENT ~ \$233
THE MAPPING AGENT RECEIVES THE MAPPING UPDATE PACKET ~\$234
IS NO
AUTHENTICATION DATA CORRECT
THE MAPPING AGENT REGISTERS CURRENT POSITION INDICATOR IN MAPPING CACHE \$236
THE MALE THE TOTAL THE TOTAL THE
TERMINAL DEVICE 11 GENERATES MOVEMENT NOTIFICATION PACKET ~\$237
TERMINAL DEVICE 11 TRANSMITS THE MOVEMENT NOTIFICATION PACKET TO TERMINAL DEVICE 13
TERMINAL DEVICE 13 RECEIVES THE MOVEMENT NOTIFICATION PACKET \$\simeq \simeq \si
TERMINAL DEVICE 13 INDICATES THE HOST NAME OR NODE IDENTIFIER OF TERMINAL DEVICE 11, AND REQUESTS THE MAPPING AGENT ADDRESS FROM THE NAME SERVER
THE NAME SERVER RECEIVES THE HOST NAME OR NODE IDENTIFIER OF TERMINAL DEVICE 11 ~\$241
THE NEME SERVER TRANSMITS THE MAPPING AGENT ADDRESS ~\$242
TERMINAL DEVICE 13 RECEIVES THE MAPPING AGENT ADDRESS FROM THE NAME SERVER
TERMINAL DEVICE 13 INDICATES THE NODE IDENTIFIER OF TERMINAL DEVICE 11. ~S244 AND REQUESTS THE CURRENT POSITION INDICATOR FROM THE MAPPING AGENT
THE MAPPING AGENT RECEIVES THE NODE IDENTIFIER \$\simes \$245\$
THE MAPPING AGENT TRANSMITS THE CURRENT POSITION INDICATOR TO TERMINAL DEVICE 13
TERMINAL DEVICE 13 RECEIVES THE CURRENT POSITION INDICATOR ~\$247
TERMINAL DEVICE 13 REGISTERS THE CURRENT POSITION INDICATOR IN MAPPING ~\$248
END